

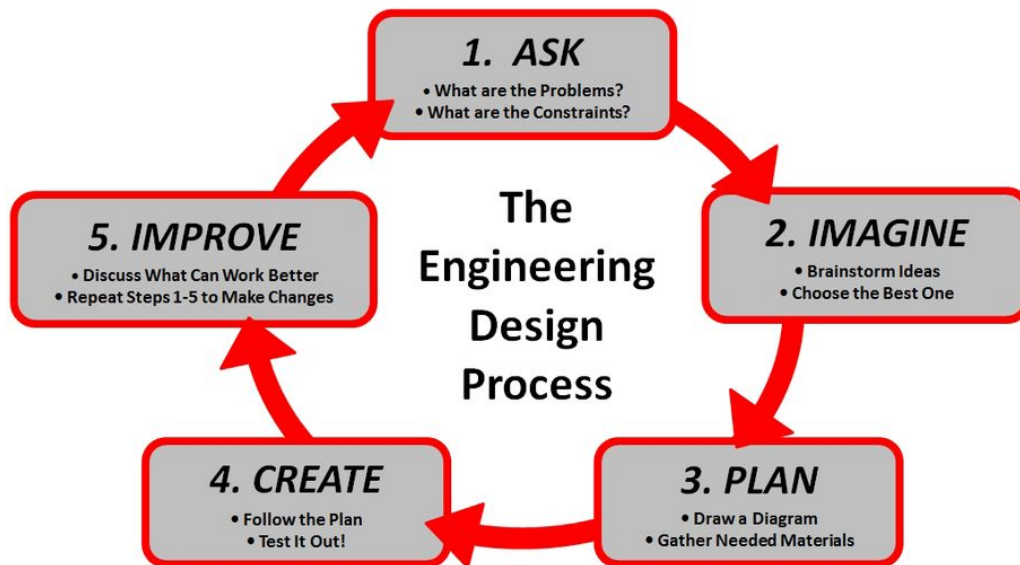
Maker Mindset! Week 6

Day 3: Find Your Path

Teacher/Parent Background:

A maze is a puzzle with twists and turns, where you try to find a path from the entrance to the exit without hitting dead ends. You can walk through a maze, or let your pencil do the walking. The goal of a maze is to get through it, which often means first going the wrong way, retracing your steps, and choosing different paths.

Related Information:



Key Terms:

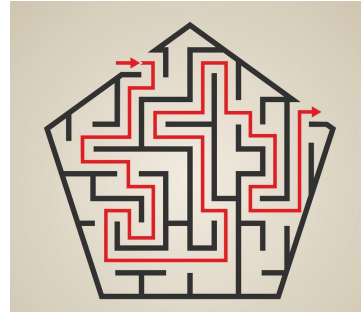
- Labyrinth
- Interconnecting
- Flexibility
- Balance
- Teamwork

Materials List:

- One marble per student
- Six drinking straws per student
- Hot glue guns, tape, and/or glue sticks
- One cereal box per student

Activity Description:

- Warm up: *Ask students if they have ever been through a maze or drawn a maze?*
 - *Allow students to describe their experiences.*
- Show the student examples of mazes:



- Give students a piece of paper to work on designing their own maze.
 - *Allow students to draw a maze in whichever style they prefer.*
 - *Make sure each student works independently.*
- Have student(s) show how a player navigates through the labyrinth.
- Build: Using materials on the list, have students create a 3D model of the maze they have drawn.
 - *Encourage student to have multiple paths that can lead to dead ends*
 - *Remind them of the constraint that marble must pass through the maze*
 - *Ask student questions as they build their design and the choices they are making.*
- Allow student time to test and improve their designs
- Have the student(s) share their thoughts on design and learning through iteration.

Closure:

- Allow The student to reflect on yesterday's activity with the cardboard, and allow them to make the connection of how they might be able to use cardboard for their arcade/board game design.
- Have the student document their thoughts in their notebook/journal.

Extension:

Build!

Sometimes high tech companies and government agencies will employ designers to set up lasers to prevent people from accessing certain areas. It is a slow strategy to navigate through a maze. Using teamwork to help each person use flexibility to go through the hallway, encourage everyone to help each other.

- Show a couple of images of hallway web challenges.
- Each student will design and build their section of the hallway maze.
- Students (and instructor) will test out their flexibility and balance as they navigate through the full maze